ABSTRACT

COMMUNICATION SYSTEM AND A RECEIVER FOR USE IN THE SYSTEM

A communication system comprises a wireless local area network (LAN) formed by a plurality of spacially separated transceivers(TR, TR'). Each of the transceivers has a transmitting section (10) for transmitting data by a combination of dual code spread spectrum techniques and a receiving section (12) for recovering the data. The receiving comprises a plurality of diversity antennas (ANT 1 to ANTn), an adaptive forward equal gain combiner (60) having a plurality of branches (62 to 74 and 62' to 74'), each branch being coupled to a respective one of said diversity antennas, an in-phase splitter (92) for splitting an output from the combiner into two output channels, means (94 to 98) for demodulating the signals in the output channels, means (104 to 108) for correlating the signals in each of the output channels with respective ones of the dual spreading codes and means (110) for recovering data from the correlated signals.

(Figure 3)